

REMARKS

Claims 1, 29 and 30 have been amended. Claim 31 has been canceled. New claim 32 has been added.

The Applicant and the undersigned would like to thank the Examiner for the courtesy of a personal interview held on June 15, 2005 to discuss the claims of the application in light of the cited art. This paper is provided as a summary of the personal interview and to address the outstanding rejections.

Claims 1, 3-11, 17, 22-26 and 29-30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,641,795 to Abe in view of U.S. Patent No. 4,415,479 to Puskas et al. The Examiner's rejections are respectfully traversed.

The Abe reference discloses a catalytic system wherein the entire catalyst unit is electrically heated. *See* col. 10, ll. 9-16. Specifically, the Abe reference discloses a catalytic system including a catalyst loaded onto an electrically heatable support, wherein the temperature of the support substantially increases when an electric current is applied to the support. As the temperature of the support increases, the temperatures of the reactant stream and catalyst also increase by way of conduction (i.e., the temperature of the catalyst and reactant stream increase due to their proximity and/or contact with the electrically heatable support). Therefore, Abe's entire catalyst unit (including the support, the catalyst, the reactants and the products) is heated to temperatures in excess of 500 °C. *See* col. 14, ll. 35-36.

The Puskas et al. reference discloses the concept of supporting a catalyst on a porous carbonaceous support. However, the Puskas et al. reference makes no mention of using electrically conductive supports or applying an electric current to the support to locally heat the catalyst dispersed therein.

In contrast, the present application is directed to a catalytic system wherein a catalyst is supported on an electrically conductive support and an electric current is supplied to the catalyst on the support such that the electric current resistively heats the catalyst, thereby increasing a temperature of the catalyst with respect to the support.

The support of the present application may act as a conduit for transferring energy to the catalyst dispersed therein, thereby heating the catalyst on a local level without substantially increasing the temperature of the support. Therefore, the catalytic system of the present application does not substantially raise the temperature of the bulk reactant gases and therefore the problems associated with altering or raising the bulk temperature of the reactant gases (e.g., various side reactions, low yields and catalyst sintering) may be avoided.

Accordingly, it is submitted that Abe and/or Puskas et al. do not teach or suggest a catalytic system wherein the catalyst is locally activated as claimed in the present application. Furthermore, it is submitted that a catalytic system wherein the catalyst is locally activated as claimed in the present application is not obvious over Abe in view of Puskas et al.

Claims 4 and 12-18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Abe in view of Puskas et al. and further in view of U.S. Patent No. 6,383,972 to Parmentier et al. In light of the foregoing, the Examiner's rejections of claims 4 and 12-18 are respectfully traversed.

Claims 19-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Abe in view of Puskas et al. and further in view of U.S. Patent No. 6,824,755 to Colbert et al. In light of the foregoing, the Examiner's rejections of claims 19-21 are respectfully traversed.

Claim 31 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,730,845 to Harper et al. in view of Puskas et al. Claim 31 has been canceled by this paper, thereby rendering the rejection moot.

Claims 1, 5, 23 and 29-30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,868,841 to Affleck et al. in view of Puskas et al. In light of the foregoing, the Examiner's rejections of claims 1, 5, 23 and 29-30 are respectfully traversed.

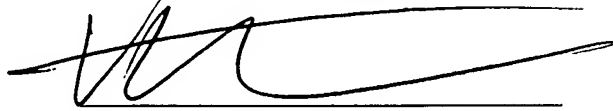
Accordingly, it is submitted that the application is in condition for allowance and formal notice thereof is respectfully requested.

The Applicant hereby authorize the Commissioner under 37 C.F.R. § 1.136(a)(3) to treat any paper that is filed in this application, which requires an extension of time, as incorporating a

Serial No. 10/658,079
Attorney Docket No. 434830-00002
Amendment

request for such an extension. The Commissioner is authorized to charge any additional fees required by this paper or to credit any overpayment to Deposit Account No. 20-0809.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Victor J. Wasylyna', written over a horizontal line.

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